GSA

Energy Center of Expertise

Energy Security

Technology and Crisis:

Making the best of a bad situation

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The Energy Center of Expertise

In addition to cost-effective measures and energy information management, the Energy Center works to enhance the reliability and availability of energy.

Straight from the top . . .

"Our government will take every possible measure to safeguard our country and our people. This administration…has the duty of putting that system into place. We will fulfill that duty."

-- President George W. Bush

Why talk about Technology and Crisis?

- Some would say that more advanced technology increases our risk to more widespread crises
- I would argue that appropriately applied and managed, technology will limit the effects of a crisis.

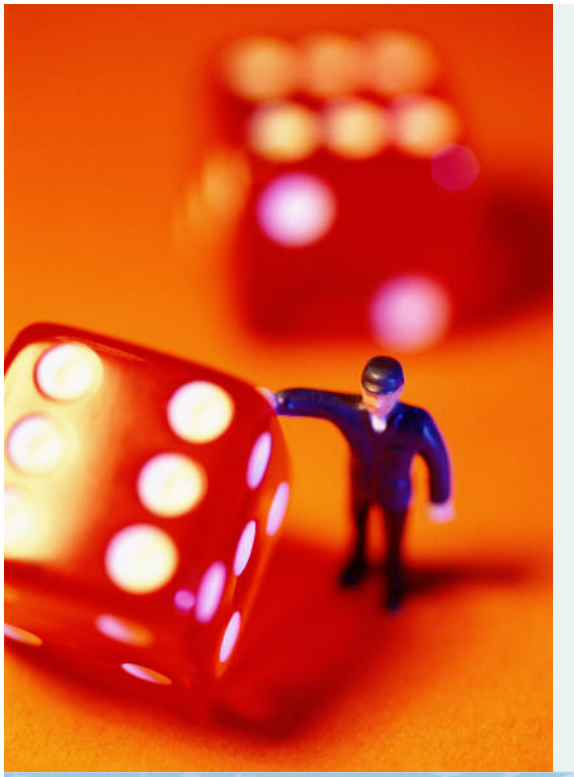
Apply the Boy Scout Motto . . .

Be Prepared.

Prepare by:

- Understanding Risk
- Preparing for appropriate contingencies
- Planning
- Practice

Understand Risk



- Bad news for “Control Freaks”
  - Risk is inherent in Life.
- Determine Risk Factors for critical activities
- Identify an acceptable level of risk
  - We often speak of “Number of 9s”

Prepare for Appropriate Contingencies

- Key word: Appropriate
  - Consider implications of over reacting
    - Impossible to manage
    - Cost factors
- Identify applicable technologies to meet the need
- Consider technologies with enhanced benefits

Planning

- Prepare a structured response to various anticipated “events”
- Be realistic
- Consider external effects of various actions
- Ensure people understand their roles and responsibilities in a crisis

Practice

… makes perfect!

So, Plan to Practice.

- Validate assumptions
- Identify weaknesses in planning
- Keep skills current
- Exercise equipment

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Case Study: FRC White Oak (FDA)

The Need

- FDA had a clear requirement for high-availability power
  - Long-term drug experiments as part of the approval process
  - Interruption in experiments would cause priceless delays

Leading the Way

GSA and FDA worked to assemble a third-party financed project to install a cogeneration system for the new campus, requiring no additional capital funding

Distributed Generation

- Distributed generation can provide secure and highly available power with the potential for economic advantages.
  - Small generators can peak-shave when advantageous from market perspective.

More than just Generation . . .

. . . It's CO-Generation!

- Generation of electricity combined with heat recovery to optimize energy use
- Helps to minimize risks of fluctuating electricity prices

The FDA Plant

- Provides extremely high availability of electricity for the entire load
- Has already proven its value
- Serves as a physical hedge in the electric market
- Is environmentally friendly
- Is planned with expansion in mind

Summary

- Prepare, Plan, and Practice
- Correctly applied technology can “save the day”
- Energy Efficiency Pays Off!
  - Consider energy conservation projects as an investment in energy security

For more information

Contact the Energy Center of Expertise

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THANK YOU!!!